T. then mentions that aside from the complete disappearance of the circumscribed nucleus in the optic lobe a semilunar bundle of fibres which forms a kind of capsule around said neucleus, was atrophied. This bundle must accordingly contain the axiscylinders of the nerve cells of the said nucleus. The fibres of the bundle are evidently homologous to the posterior root fibres of the spinal nerves which Cajal found to take origin from motor ganglionic cells. The grouping of said fibres to a circumscribed bundle in the optic nerve denotes that the latter is higher organized than the posterior roots of spinal nerves. Otherwise there is a complete homology. The spinal ganglion of the spinal nerves is represented by the retina for the optic nerves. The nerve nuclei for the optic nerve are homologous with those ganglionic cells of the spinal cord around which the fibres of the posterior roots spread their end trees. A similar homology with the posterior roots and spinal ganglions of spinal nerves can be found for the acoustic nerve; here the ganglion spinale cochlea corresponds to the spinal ganglion of spinal nerves.

ONUF.

On the Fine Anatomy of the Optic Roof (***tetto optico***) ***of the Teleostei Fish.***—D. Mirto (*Rivista sperimentale di freniatria, etc.*, vol. xxi , 1895, fasc. I.)

M. worked with the method of Golgi. His conclusions are:

I. The superficial fibres of the optic nerve are centripetal ; they terminate in the optic roof (tetto optico), a small part of them also in the corpus geniculatum externum by means of the so-called terminal arborisations.

II. Those of the deep (central) optical fibres, which originate from cells of the optic roof, are centrifugal of those which direct themselves towards the corona radiata of Gottsche coming directly from the optic nerve or from the optic roof. Nothing positive can be said neither regarding their nature nor regarding their connections, our knowledge on the general connection of nerve elements not being sufficiently advanced in that direction.

III. The protoplasmatic processes in the optic roofs seem to be chiefly apparatus for the storage of luminous stimuli, at least their intimate relation to the terminal arborisations of the superficial optic fibres speaks in favor of this theory.

IV. The protoplosmatic processes of certain cells of the optic roof have such a uniform and fine delicate appearance in their whole course that they can not be distinguished from the nervous processes which give origin to a nerve fibre. It seems that in fish a real differentiation between protoplasmatic and nervous processes is not perfectly established yet.

ONUF.

PHYSIOLOGICAL.

Section of Both Pyramids in Dogs.—Preliminary communication. T. Starlinger (*Neurolog. Centralblatt*, No. 9).

The technic of the operation consisted in freeing the basilar portion of the occipital bone and trephining it. The pyramids are thus made visible and could be cut through with surety and ease at the point where they come forth from beneath the trapezoid body. The animals first showed slight motor disturbances which gradually vanished, so that two weeks after the operation they did not differ from normal dogs, being just as lively and skillful in their movements. Microscopic examination of the medulla of the operated dogs proved that the pyramids had been completely severed.

The author concludes :

1st. That the pyramidal tracts of dogs have only subordinate importance for locomotion.

2d. That in dogs there must still exist a motor pathway for the transmission of impulses from the cerebral cortex to the muscles which tract does not have its course within the pyramids. ONUF.

PATHOLOGICAL.

Facial Hemiatrophy.—Möbius. (*Specille Pathologie und Therapie.* XI. Band, 1895).

After a short historical sketch the author first considers the subject in a general way. Local trauma seems to be the most frequent cause for its appearance, and especially in younger subjects The characteristic symptom of this slowly developing disease, is the circumscribed atrophy of the skin on the face. Sometimes confined to a small spot, at other times involving one complete half of the face and even at times extending over to the opposite side, with regard to the depth of the parts involved it also varies. In some the skin is affected. In others the fat layer bones and muscles are involved. The glands of the skin and hair do not escape. Sometimes one-half of the tongue is affected. Besides the circumscribed atrophy other symptoms may alone be present. One of the most frequent is trigeminal neuralgia.

Muscular twitchings, which the author thinks may be due to the neuralgia or active disease of the muscles often show themselves. Occasionally spasm of the muscles of the jaw.

This disease may continue to advanced age.

But sooner or later the atrophy reaches its maximum point and then the condition remains unchanged. The author then goes into a thorough discussion of the symptoms individually.

First: With regard to the nature of the atrophy in the skin. He is inclined to believe that the atrophy in a great many cases slowly advances over the diseased area and have all the characteristics of the simple atrophy of the skin described by Lesser, viz., an advancement with an infiltrated marginal wall clearing behind the atrophied skin. In other cases he supposes this to be merely a simple atrophy and nothing more.

Second: The extension of the atrophy. In the majority of cases only one-half the face is involved. In others both sides of the face. This atrophy may occur, however, on other parts of the body also. Again in those cases where there is merely "Hemiatrophia Facialis," the atrophy may extend over a greater or lesser area of a circumscribed space. The author describes several cases which have come under his own observation with profuse illustrations accompanying.

Thirdly: As a consequence of the atrophy, disfiguration results.

Fourth: Accompanying symptoms

(1). Trigeminal neuralgia. Twitchings are most often noticed in these cases.

(2). Sympathetic disturbances.

(3). Hemiplegia in a case of Pary's. Insanity in Bergson's and Mendel's cases. Epilepsy in a case of Meyer's.

Anatomically there has been discovered in a case of Jolly's a brain sclerosis. With regard to the ætiology the author considers it an exogenous disease. Begins in youth and is more frequent amongst women. The left side more often affected than the right.

The author is very strongly inclined to believe that this disease is due to an external local infection. That this infection may take place either in the region of the tonsils, mucous membranes, or skin. The numerous cases which are cited, and the discussion which the author enters into in order to substantiate this theory should be read in the original.

Pathological anatomy. Here little is to be learned from the autopsies.